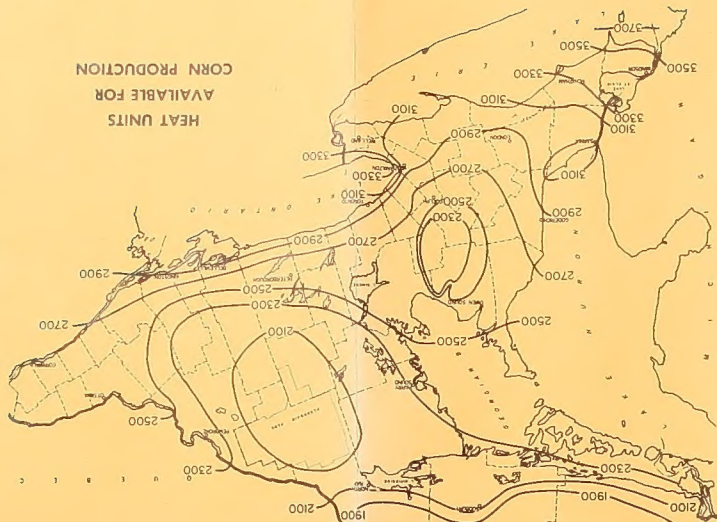


HEAT UNITS  
AVAILABLE FOR  
CORN PRODUCTION



## HEAT UNITS

## ONTARIO CORN COMMITTEE

This organization is made up of representatives of the Canada Department of Agriculture, the Ontario Department of Agriculture and Food, the University of Guelph, the Ontario Soil and Crop Improvement Association, the Ontario Seed Corn Growers' Marketing Board and the Canadian Seed Growers' Association. Tests are conducted each year by the following Co-operating Agencies:

Research Station, Harrow  
Ridgetown College of Agricultural  
Technology, Ridgetown  
Ontario Agricultural College, Guelph  
Kemptville College of Agricultural  
Technology, Kemptville  
Research Station, Ottawa  
Research Station, Smithfield

## HYBRIDS TESTED

Hybrids meeting certain standards of performance are Recommended. The Recommended Hybrids are then entered in the Performance Trials as soon as seed is available and the results are shown in this folder. Hybrids not reported are those not recommended for the current year either because of lack of performance, non-availability of seed or because the hybrid is being discontinued.

## TESTING METHODS

The seed used in the performance trials was obtained from samples of each hybrid taken at random by representatives of the Ontario Corn Committee on the premises of the producing company.

In each trial, hybrids were replicated in a suitable experimental design and received equal fertility and weed control. Trials were either hand or machine planted with an excess of seed and thinned at an early growth to obtain a uniform population. All trials were harvested with a mounted picker-sheller, except for Brucefield, Fullarton, and Elora, and all ears were removed from the plots.

Immediately before harvest, a count was made of all plants broken below the ear and from this count, the percentage of broken stalks was determined. The moisture percentage of the grain was determined at harvest time to indicate the relative maturity of each hybrid.

### TESTING METHODS — (Continued)

The weight of grain harvested from each plot was determined and yield of shelled corn in bushels per acre was calculated and reported at 15% moisture.

Silage yields were not taken in the Performance Trials. Experience has demonstrated that hybrids producing high grain yields also produce high silage yields. In the selection of a hybrid for silage purposes, the percentage of broken stalks may be a minor consideration since corn is usually harvested for silage before stalk breakage occurs.

## SOUTHERN CORN LEAF BLIGHT

Although not seriously affecting yields, Southern Corn Leaf Blight was commonly found throughout Ontario at the end of the 1971 season. For this reason the Seed Corn Dealers' Association and the Ontario Corn Committee agreed that all seed corn sold for 1972 planting would again be tagged to indicate the method by which the seed was produced, i.e. N (normal), T (Texas male-sterile), or B (blend of N and T). Hybrids produced from normal cytoplasm (N) were available for Southern Corn Leaf Blight and the Yellow Leaf Blight. Hybrids produced using Texas male-sterile cytoplasm are susceptible. Most of the 1971 seed production utilized normal cytoplasm so there should be enough N seed available to plant the 1972 crop.

## SEED CORN DEALERS

[illegible]

## LOCATION AND GENERAL INFORMATION — 1971 TRIALS

Location & Heart Units Available	Co-Operator	Date Planted	Date Harvested	Population
Malden 3500	W. G. Sellers	May 10	Oct. 13	17,400
Woodale 3400	Soil Substitution	May 11	Oct. 18	17,400
Fletcher 3300	Ston. Wonnacott	May 3	Oct. 7	18,500
Ridgetown 3250	R.C.A.T.	May 4	Oct. 8	18,500
Wyoming 3050	Lawrence Markuse	May 6	Oct. 15	18,500
Fingal 3000	Julius Vrieg	May 7	Oct. 20	18,500
Smithfield 2900	Experimental Farm	May 13	Oct. 27	21,700
Bracefield 2850	Mrs. Malcolm Davidson	May 11	Oct. 15	20,900
Fulleton 2700	Murray Salves	May 7	Oct. 13	20,900
Fullerton 2650	Research Station	May 18	Oct. 18	19,400
Ottawa 2600	K.C.A.T.	May 14	Oct. 20	20,000
Kemphville 2550	O.A.C.	May 13	Oct. 19	20,900
Elora 2500	Allan James	May 11	Nov. 4	20,000
Chatham				

## Choosing Hybrids

**EXAMPLES:**  
Find the location of your farm on the map and estimate the heat units available for your vicinity. If you plant corn BEFORE mid-May choose one of the hybrids with a requirement no greater than the heat units available in your vicinity.

Direct comparison of hybrids between tables should not be made, since each table is composed of averages obtained from different groups of

### INTERPRETATION OF RESULTS

Each week of delay and select hybrids accordingly. 100 day plants until AFTER mid-way then DEDUCT 1 day planting until

If soil conditions or any other factors usually

3500	heart units available	3500-3100	heart unit rating
3200	heart units available	2900-2900	heart unit rating
2900	heart units available	2300-2700	heart unit rating
2600	heart units available	2500-2500	heart unit rating

come from hybrids with:

ore:

### Moisture At Harvest

moisture at harvest time is an indication of relative maturity within each table, and often early hybrids yield as well as, or better than, late hybrids within any one table.

### Broken Stalks

stalk strength should be compared only with hybrids of the same maturity.

### Acre Yields

[illegible]

## 1972 REPORT

# Ontario Hybrid Corn

CA20N  
AF  
-Z220

3 1761 11469704 8

## Performance Trials

CONDUCTED IN 1970 & 1971 BY  
THE ONTARIO CORN COMMITTEE



# T-1 AVERAGE OF 2 TRIALS IN 1971 LOCATED IN 2500-2600 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
United 106 SC	12	23.8	148		
Warwick S1209 SC	17	23.9	136		
Co-Op S240 SC	12	24.2	141		
DeKalb 007 DC	19	24.7	128		
Stewarts 2301 SC	16	25.1	130		
United 108 SC	16	26.1	137		
Pioneer 3772 3W	15	26.8	126		
N. K. K410 DC	9	26.9	151		
P.A.G. S242 SC	18	27.4	124		
United 4 DC	20	28.3	120		
DeKalb X1301 3W	8	29.3	144		
Funk's G4082 3W	11	29.7	141		
Co-Op 247 DC	10	29.7	141		
Stewarts 2704 SC	10	28.4	133		
Warwick T201 3W	13	29.2	137		
Stewarts 2606 SC	18	28.2	125		
Pioneer 3889 DC	6	30.0	126		
Pioneer 3873 DC	7	29.7	139		
Warwick 214 DC	9	27.9	134		

# T-2 AVERAGE OF 4 TRIALS IN 1970-1971 LOCATED IN 2500-2600 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
United 106 SC	15	25.7	143		
Warwick S1209 SC	21	25.0	121		
DeKalb 007 DC	21	26.2	123		
United 108 SC	21	26.7	136		
P.A.G. S242 SC	16	26.8	140		
N. K. K410 DC	17	27.6	149		
United 4 DC	19	27.9	129		
DeKalb X1301 3W	5	28.5	125		
Stewarts 2704 SC	14	28.9	118		
Warwick T201 3W	14	28.9	118		
Stewarts 2606 SC	10	29.5	133		
Pioneer 3889 DC	10	29.7	127		
Pioneer 3873 DC	10	29.6	132		
Warwick 214 DC	11	28.5	125		

# T-3 AVERAGE OF 3 TRIALS IN 1971 LOCATED IN 2500-2700 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
United 106 SC	15	23.2	139		
Warwick S1209 SC	19	23.1	137		
Co-Op S240 SC	21	23.3	141		
DeKalb 007 DC	24	23.7	119		
Stewarts 2301 SC	24	22.9	126		
United 108 SC	24	24.2	137		
Pioneer 3772 3W	15	24.8	120		
P.A.G. S242 SC	18	24.6	146		
N. K. K410 DC	22	25.8	122		
United 4 DC	24	26.4	124		
DeKalb X1301 3W	6	24.1	131		
Funk's G4082 3W	7	25.4	140		
Co-Op 247 DC	26	26.2	136		
Stewarts 2704 SC	18	24.6	139		
Warwick T201 3W	25	25.5	116		
Stewarts 2606 SC	26	24.2	124		
Pioneer 3889 DC	8	26.1	122		
Pioneer 3873 DC	10	26.4	131		
Warwick 214 DC	14	26.4	130		
P.A.G. S242 SC	15	24.6	140		
Pride 110 DC	14	27.2	126		
Stewarts 2714 DC	17	27.2	124		
Pioneer 3760 SC	5	31.1	149		
Seneca 165 DC	8	27.8	124		
Funk's G5145 DC	15	28.5	150		
Funk's G5150 DC	14	28.3	134		

# T-4 AVERAGE OF 6 TRIALS IN 1970-1971 LOCATED IN 2500-2700 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
United 106 SC	15	23.2	139		
Warwick S1209 SC	25	23.2	121		
DeKalb 007 DC	22	23.8	121		
United 108 SC	26	24.3	128		
P.A.G. S242 SC	27	24.5	135		
N. K. K410 DC	21	25.3	113		
United 4 DC	16	25.5	122		
DeKalb X1301 3W	8	27.2	127		
Funk's G4082 3W	12	25.3	125		
Stewarts 2704 SC	22	25.2	136		
Warwick T201 3W	21	26.7	121		
Pioneer 3889 DC	12	26.4	124		
Pioneer 3873 DC	12	26.7	132		
Warwick 214 DC	15	26.7	121		
P.A.G. S242 SC	14	26.1	125		
Pride 110 DC	14	26.1	125		
Funk's G5145 DC	22	28.3	144		
Funk's G5150 DC	17	28.2	125		

# T-5 AVERAGE OF 2 TRIALS IN 1971 LOCATED IN 2700-2900 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
P.A.G. S242 SC	29	22.9	115		
N. K. K410 DC	27	23.8	93		
United 4 DC	29	24.3	100		
DeKalb X1301 3W	8	23.3	90		
Funk's G4082 3W	21	22.7	112		
Co-Op 247 DC	41	22.4	111		
Stewarts 2704 SC	30	25.6	92		
Warwick T201 3W	20	25.9	107		
Stewarts 2606 SC	13	23.9	95		
Pioneer 3889 DC	13	23.9	95		
Pioneer 3873 DC	10	24.9	107		
Warwick T201 3W	10	24.9	107		
P.A.G. S242 SC	12	24.7	118		
Pride 110 DC	19	25.6	92		
DeKalb X1301 3W	6	27.1	114		
Pioneer 3760 SC	6	27.1	129		
Seneca 165 DC	6	25.6	109		
Funk's G5145 DC	21	26.1	117		
Funk's G5150 DC	21	26.1	117		
DeKalb X1301 3W	8	25.2	110		
Stewarts 2714 DC	35	25.0	109		
Stewarts 2704 SC	24	24.8	105		
United 7 DC	24	24.6	108		

## T-7 Continued

N. K. P4442 3W	13	24.6	112
N. K. P4446 3W	7	26.9	118
N. K. P4210 SC	5	24.4	128
Assigned:			
United R336 OC	8	25.1	117
Pioneer 3853 DC	10	25.5	111
Pioneer 3959 3W	12	28.0	111
Pioneer 3956 SC	4	27.7	106
Warwick 292 DC	7	28.6	116
Co-Op 277 DC	7	27.2	107
Michigan 275-2X DC	21	26.9	129
P.A.G. S248 SC	20	27.8	124
P.A.G. 25 DC	14	27.6	124
DeKalb 45 DC	8	27.8	119
Co-Op 270 DC	24	28.9	105
Co-Op S280 OC	7	28.9	106
Seneca 285 3W	20	28.6	130
Jacques JX952 SC	10	25.3	113
Funk's G4180 3W	9	27.7	120
Funk's G4110 SC	21	29.0	120
Pride R221 3W	5	26.7	105
Pioneer 3909 SC	2	28.8	104
Jacques JX902 SC	5	28.8	108
N. K. P4210 SC	5	27.5	107
Reak R98 DC	12	29.8	111
Funk's G2643 DC	11	29.8	130
Stewart 2913 SC	8	29.7	127
Stewart 2913 DC	11	29.7	127
Jacques 951J DC	12	29.3	117
Pride 280 DC	11	29.3	117
Seneca X3316 3W	13	28.0	108

# T-6 AVERAGE OF 6 TRIALS IN 1970-1971 LOCATED IN 2700-2900 HEAT UNIT AREAS

Heat Unit Rating	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
P.A.G. S242 SC	29	22.9	115		
DeKalb X1301 3W	20	22.5	96		
Funk's G4082 3W	31	23.2	96		
Stewarts 2704 SC	29	22.2	88		
Stewarts 2606 SC	29	24.5	115		
Pioneer 3889 DC	27	23.9	102		
Pioneer 3873 DC	25	24.0	104		
Warwick T201 3W	25	24.2	103		
P.A.G. S242 SC	29	24.3	114		
Pride 110 DC	22	25.2	106		
Funk's G5145 DC	32	25.1	117		
Funk's G5150 DC	21	24.8	111		
DeKalb X1304 3W	20	25.0	118		
Stewarts 4711 SC	32	25.4	114		
United 7 DC	26	25.1	112		
N. K. P4442 3W	15	25.2	116		
N. K. P4446 3W	12	26.9	119		
N. K. P4210 SC	7	25.6	126		
Pioneer 3959 3W	25	25.8	115		
Pioneer 3956 SC	17	25.9	125		
Warwick 292 DC	21	25.9	117		
P.A.G. S248 SC	21	26.9	125		
P.A.G. 25 DC	21	26.5	123		
DeKalb 45 DC	14	26.3	121		
Co-Op 270 DC	29	26.7	106		
Co-Op S280 OC	12	25.5	107		
Seneca 285 3W	20	27.4	125		
Jacques JX952 SC	10	26.4	121		
Funk's G4180 3W	11	26.9	124		
Funk's G4110 SC	24	27.3	125		
Pride R221 3W	3	26.5	123		
Pioneer 3909 SC	7	27.4	121		
N. K. P4210 SC	24	27.3	125		
Reak R98 DC	12	27.9	118		
Pride R200A DC	10	28.3	136		
Funk's G4263 3W	10	28.3	136		
Jacques 951J DC	12	28.7	128		
Seneca X3316 3W	13	28.0	120		

# T-7 AVERAGE OF 2 TRIALS IN 1971 LOCATED IN 2900-3100 HEAT UNIT AREAS

Heat Unit Rating	Hybrid	Hybrid Type	Broken Stalks at harvest %	Moisture at harvest %	Shelled Corn at harvest 15% moisture Bu.	Acre Yield at 15% moisture Bu.
Seneca 165	DC	10	24.2	105		
DeKalb X1304	3W	16	24.2	105		
Stewarts 4711	SC	8	25.4	104		
Jacques JX22	SC	4	23.2	104		
United 7	DC	23	24.1	101		
N. K. P4442	3W	8	24.5	115		
N. K. P4446	3W	4	25.3	110		
N. K. P4210	SC	4	25.0	129		
Assigned:						
United R353	OC	5	24.7	128		
Pioneer 3853	DC	10	23.8	103		
Pioneer 3959	3W	16	24.7	117		
Pride R121	3W	27	24.5	104		
Pioneer 3956	SC	10	25.5	127		
Warwick 292	DC	14	26.6	111		
Co-Op 277	DC	21	26.8	113		
Michigan 275-2X	DC	21	26.0	126		
P.A.G. S248	SC	14	26.3	111		
P.A.G. 25	DC	9	26.2	119		
DeKalb 45	DC	8	26.4	106		
Co-Op 270	DC	10	26.3	106		
Co-Op S280	OC	7	27.0	95		
Seneca 285	3W	20	27.0	109		
Jacques JX952	SC	5	25.8	107		
Funk's G4180	3W	4	25.7	119		
Funk's G4110	SC	8	26.3	119		
Pride R221	3W	5	25.4	127		
Pioneer 3909	SC	2	25.8	125		
Jacques JX902	SC	5	27.8	122		
N. K. P4446	3W	6	27.8	122		
Pioneer 3814	DC	11	26.3	112		
Reak R98	DC	7	26.9	116		
Stewart 2913	SC	3	29.0	139		
Funk's G4263	3W	9	28.4	124		
Jacques 951J	DC	15	26.7	114		
Pride R200A	DC	9	26.8	115		
Pride 280	DC	11	27.3	115		
Seneca X3316	3W	13	26.8	111		
Seneca X3321	3W	26	26.5	115		
Warwick 316	DC	13	27.4	117		
Warwick 405	DC	5	29.0	115		
Pioneer 3784	SC	3	29.4	137		
Pioneer 3959	3W	16	24.7	117		
Acco UC1900	SC	5	31.0	125		
DeKalb X1316	3W	31	29.0	110		
DeKalb X1316	3W	7	30.5	132		
DeKalb X1316	3W	5	28.8	133		
Warwick S1416	3W	7	30.1	131		
Pioneer 385	OC	32	27.1	111		
Seneca 318	3W	9	28.4	115		
DeKalb X1316	3W	18	28.1	118		
Stewarts 2300E	SC	6	28.8	121		
P.A.G. S242	SC	1	29.7	120		
Jacques 1004E	DC	121	27.9	121		
P.A.G. 58	3W	3	31.2	119		
Pioneer 3773	SC	8	31.5	122		
Pride R381	3W	2	29.8	115		
Co-Op 270	DC	8	28.6	116		
Funk's G4252	3W	8	29.0	128		